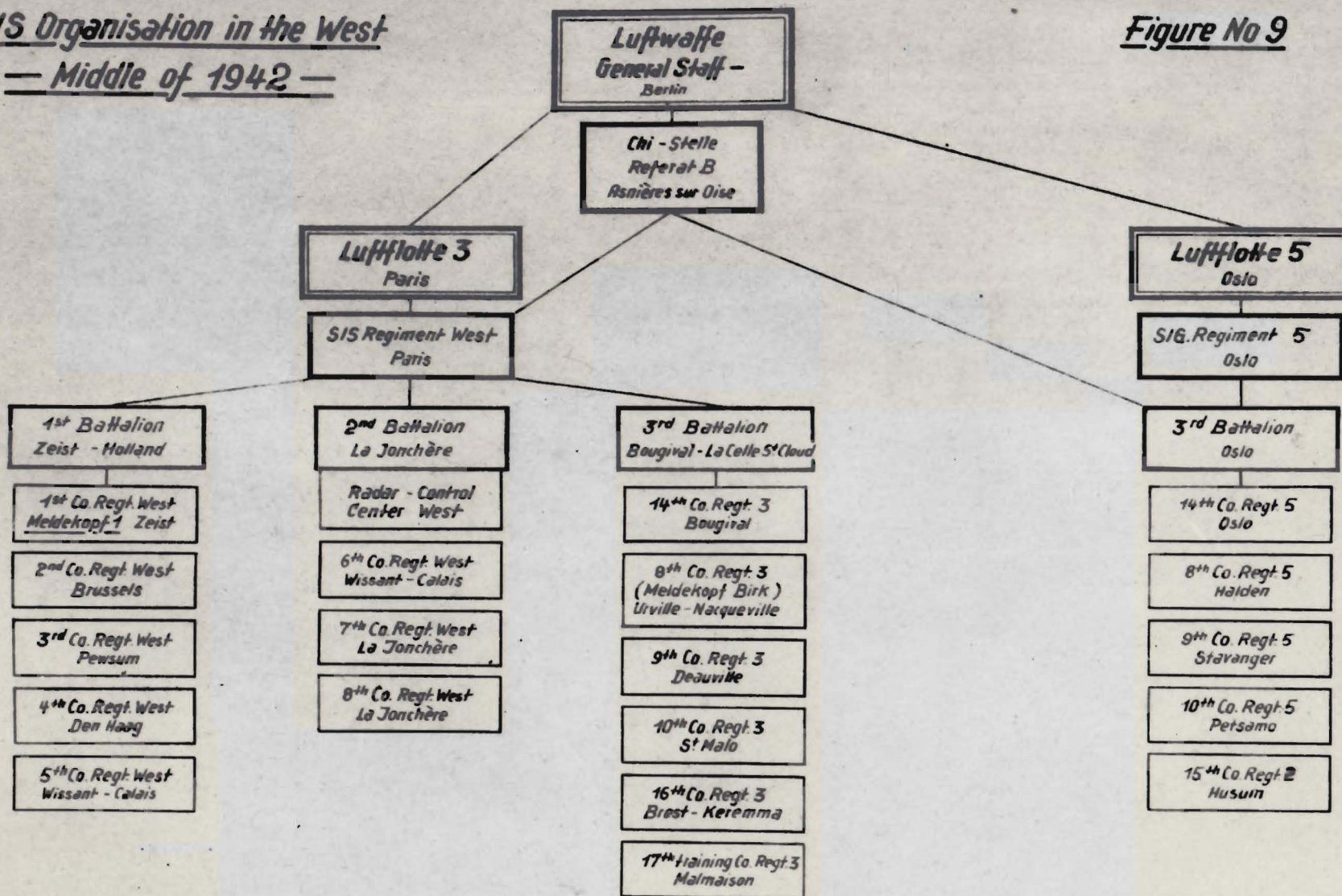


SIS Organisation in the West
— Middle of 1942 —

Figure No 9



Geographical locations,
SIS units in the West,
— Middle of 1942 —

1 Regiment
with 3 Battalions
(total: 14 Companies)
attached
1 Battalion*
(with 5 Companies)
approx: 3000 men

* The battalion in Norway had, due to its location, also tasks in the East.

-35b-

SIS Regt. West

8th Co. Regt. 3 VHF R/T

16th Co. Regt. 3 HF W/T

10th Co. Regt. 3 HF W/T

9th Co. Regt. 3 HF R/T, W/T

3rd Battalion

14th Co. Regt. 3 evaluation

17th Co. Regt. 3 training

2nd Battalion West (Radar Control Center)

7th Co. Regt. West Radar observation

8th Co. Regt. West Jamming

6th Co. Regt. West Radar observation



10th Co. Regt. 5 HF R/T, W/T

14th Co. Regt. 5 evaluation

8th Co. Regt. 5 HF R/T, W/T

9th Co. Regt. 5 HF R/T, W/T

15th Co. Regt. 5 HF R/T, W/T

3rd Co. Regt. West HF W/T

1st Battalion

4th Co. Regt. West evaluation and Meldekopf

4th Co. Regt. West HF W/T

2nd Co. Regt. West HF W/T

5th Co. Regt. West HF W/T

Figure No 10

Liaison and Channels of Communication of the SIS in the West with Luftwaffe Staffs, Middle of 1942

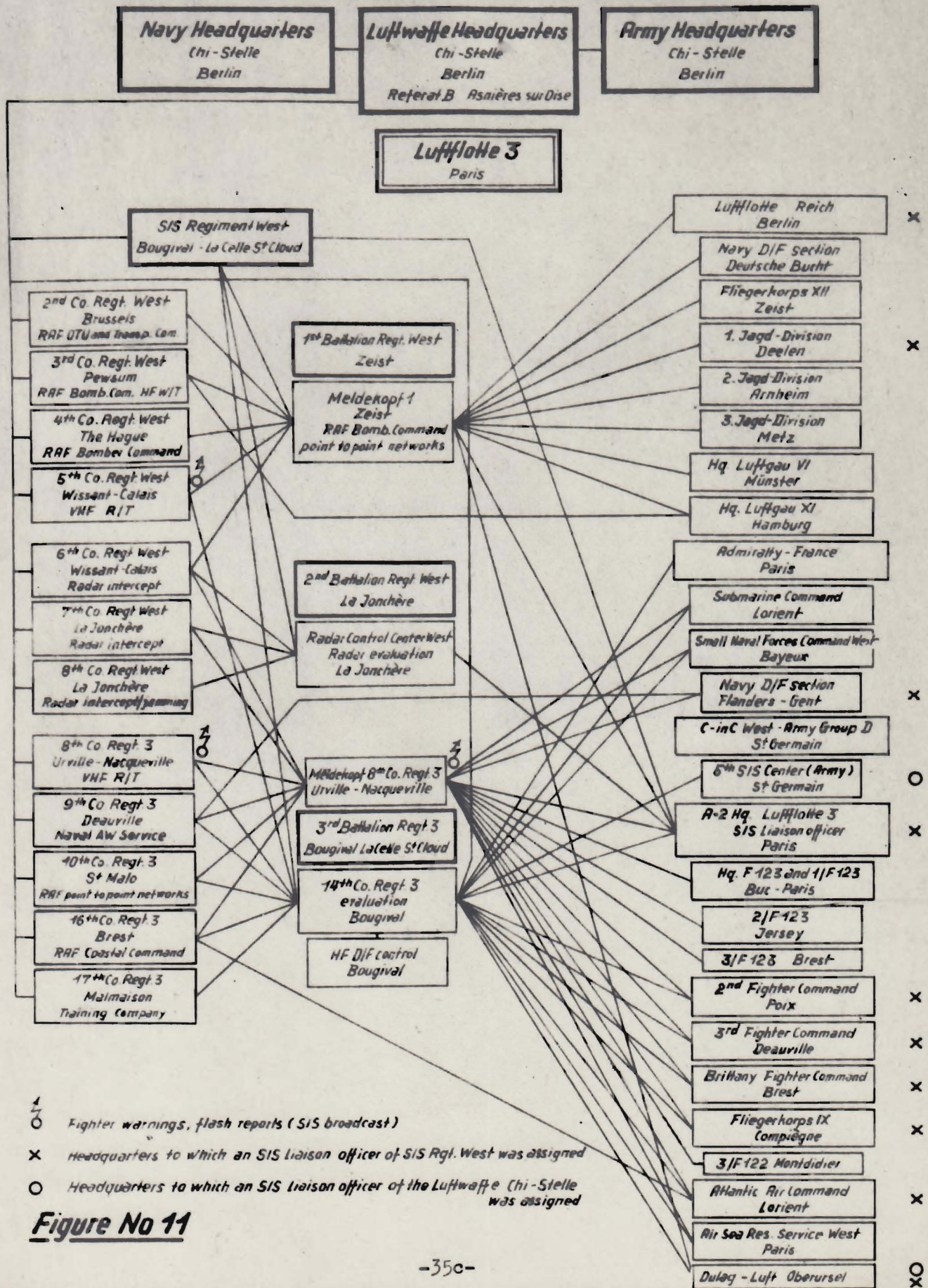


Figure No 11

TOP SECRET

Germany.

While Germany was combining its offensive units in the Luftflotte 3 area, which had been greatly reduced in strength through continuous action, with fighter units for the purpose of defending the Channel coast, there also began an expansion of the defense system within Germany, under the direction of Luftflotte Reich, first against night raids and later against those by day.

The war in the East had put not only the Luftwaffe, but also the armies in the West, on the defensive. The importance of the SIS increased, and both Luftflotte 3 and the defense of Germany required its support more and more urgently. The extensive radar organization, which long ago had passed the experimental stage, seemed to demand incorporation into the general framework of Signal Intelligence.

Thus, after six month's negotiations, the SIS Regiment West was activated. In it were included the two special radio units of the German Postal Service and the Luftwaffe Procurement Division. The scientific chiefs of this undertaking, who either could not or would not agree on the tactical employment of their monitoring work, were removed. The SIS fixed stations became numbered companies and discarded their cover-names. In keeping with the interests of Luftflotte 3 and Luftflotte Reich, the Regiment was assigned to Luftflotte 3 Headquarters and organized into three battalions. (See Figure 9).

1st Battalion, Signal Intelligence Regiment (West)

with: 1 evaluation company

3 W/T intercept companies (with individual D/F networks)

1 R/T intercept company (this company was later placed

under the 3rd Battalion).

TOP SECRET

TOP SECRET

The 1st Battalion was formed from the SIS station in Pewsum, the 9th Company of the Signal Regiment of Luftflotte 2 in the Hague, the SIS-station in Schepdael-Brussels, the R/T VHF platoon in Wissant-Galais, the SIS-station in Bougival near Paris (transferred to Pewsum), and parts of the W-Leitstelle 3 in Bougival.

This battalion concentrated on the area of the Deutsche Bucht, Holland and Belgium (See Figure 10).

- Missions:
1. Interception of HF W/T and R/T traffic of the RAF Bomber Command (later also the USAAF), and all traffic relating to it. Monitoring at the same time of 16 Group, RAF Coastal Command.
 2. Independent evaluation of this traffic and issuing of reports.
 3. Passing on of tactical intelligence to Luftflotte 3 Headquarters, and to the commanders of Luftflotte Reich and Fliegerkorps XII. (For this purpose appropriate evaluators were transferred from the W-Leitstelle 3 to Zeist, Holland).

The battalion organized its work in a purposeful manner. The three W/T companies gave the greater part of their analysts to the evaluation company, which was in Zeist. Flash reports, like the monthly reports, were thereafter done by the evaluation company only.

In this way Meldeskopf 1 came into existence, its original mission being to provide advance warning of enemy raids.

TOP SECRET

TOP SECRET

2nd Battalion, Signal Intelligence Regiment West

- with: 1 evaluation company (Radar Control Center)
- 2 radar intercept companies
- 1 jamming company

The 2nd Battalion was formed from the two special radar units of the German Postal Service and the Luftwaffe Procurement Division, and the replacements that later followed.

The area with which the battalion concerned itself consisted of Holland, Belgium, and France. (The out-stations of the companies are not shown in Figure 10).

- Mission:
1. Interception of heavy, medium, and light ground radar signals.
 2. Monitoring of navigational aids.
 3. Interception of airborne radar.
 4. Jamming of enemy ground and airborne radar.
 5. Independent evaluation of these monitoring commitments and issuing of reports.

The importance of radar interception increased day by day, and, in working with the SIS, soon surpassed the backward and inflexible Air Raid Warning Service.

The interception of British ground radar in connection with R/T traffic gave a clear picture of enemy fighter control methods. Radio beacons and directional beam installations furnished an additional medium for the prediction of raids by heavy bomber units.

The monitoring of the IFF recognition signal with a cathode ray tube, and the D/F-ing of this signal made it possible to plot enemy for-

TOP SECRET

TOP SECRET

mations and determine to which organizations they belonged. Thus concentrations and sorties of enemy fighters or bombers could be noted before they crossed the English coast, and our fighter defense could be given timely warning and instructions.

3rd Battalion, Signal Regiment 3, Legion Condor

(Since the Battalion was formed out of the 3rd Battalion of Signal Regiment 3, this name was retained for reasons of tradition).

with: 1 evaluation company (formerly the W-Leitstelle 3)
3 W/T intercept companies (with individual HF D/F networks)
1 R/T intercept company
1 school and replacement company.

The 3rd Battalion was formed from the W-Leitstelle 3 in Bougival, the 8th, 9th, and 10th companies of Signal Regiment 3, located in Urville-Cherbourg, Deauville, and St. Malo, respectively, SIS station in Brest, and the SIS-School in Malmaison, near Paris.

The battalion was stationed in France.

Missions: 1. Coverage of the RAF Coastal Command.
2. Coverage of the RAF Fighter Command (later also the 8th USAAF Fighter Command).
3. Coverage of the RAF Army Cooperation Command (later TAF).
4. Coverage of the RAF Air Raid Warning Service and the radio traffic of the naval air arm, the Balloon Command, the Ferry Command, supply, training, transport, and unidentified networks.

TOP SECRET

TOP SECRET

5. Independent evaluation of this traffic and issuing of reports.
6. The passing on of tactical intelligence to the units of Luftflotte 3.

This battalion had more varied tasks than that of the other two. Its evaluation company lost its position as a central evaluation station for the entire West. The regimental staff was located in its area.

Staff of the Signal Intelligence Regiment West

The regimental commander had as his assistants:

Adjutant IIa, IIb	(Personnel and administration)
Major of the Staff	(Representative of the Commanding Officer)
Group I Ia(H)	(Operations, evaluation, equipment)
I N	(Radio Operations)
III N	(Signal supply, wire and radio)
III K	(Transportation)

In creating the regiment, serious mistakes were made in reference to organization and personnel.

- a) An SI-Battalion commander from the Eastern Front was assigned as commanding officer of the regiment, since none of the SI-officers commanding units in the West had the required length of military service. The officer assigned to this most important position, which was an exceptionally difficult one from both the technical and military standpoint, brought nothing with him but his seniority. It is also to be regretted that he was incapable of selecting able assistants from among the outstanding personnel of the Western Regiment. Therefore, he

TOP SECRET

TOP SECRET

became a prisoner of his own staff, and the regiment remained a feeble organization to which the ambitious and talented battalion commanders, as well as the SI-liaison officers, simply paid no heed;

- b) Two line officers, with no SIS experience, were assigned as commanding officers of the 1st and 3rd Battalions. This led to continual controversies with the self-conscious, self-assured evaluation officers, some of which took on grotesque forms. For example, the commanding officer of the 1st Battalion had the highly talented but over-ambitious chief of his evaluation company committed to an insane asylum. For this act he was removed from the battalion, and the command given to his erstwhile victim who was promoted to captain.

In the 3rd Battalion the diplomatic cunning of the commander proved superior to his evaluation officers. He changed them continually, which led to a decline in efficiency of the evaluation company. Finally, after numerous failures; it was decided also in this case to give the position of commanding officer to a specialist.

- c) The 2nd Battalion was commanded by a scientist. As a tactician he left much to be desired, and at the end of a year, during which time he did considerable damage, he had to be removed. Instead of his being placed in charge of the development of radar intercept receivers, in which field he could have undoubtedly made good use of his qualifications as an VHF technician, he became head of the entire radar section in the Office of

TOP SECRET

TOP SECRET

the Chief Signal Officer of the Luftwaffe, thereby giving wider scope to his inefficiency.

- d) The three evaluation companies worked completely independently of one another. Operationally there was no controlling body for the regiment. Referat B, which had directional authority over the companies of the regiment in all SIS matters, and which, thanks to its experienced, well-selected personnel, functioned most excellently in studying enemy navigational aids, in all questions of final evaluation, and in cooperating with Dulag Luft and technical staffs, had no intention of subordinating itself to the command of a regiment with no ideas, and which perhaps would have decreased its efficiency. On the other hand, it certainly was prevented by the existence of the regiment from interfering in administrative matters. It would have been correct to place the evaluation sections under the regiment and would include Referat B. In this way Referat B would not have been reduced in importance, nor its work for the A-2 of Luftwaffe Headquarters curtailed. As things stood, however, the growth of the SIS remained dependent on the initiative and inspiration of capable company and battalion commanders.

3. Strength (See Figures 9 and 10)

In the middle of 1942 the regiment consisted of 3 battalions with a total of 14 companies. In addition, there was the battalion in Norway with 5 companies. The approximate over all strength was 3000 men.

TOP SECRET

TOP SECRET

4. Operations

A sharper division developed between the evaluation and intercept companies, except where evaluation problems arising from special tasks or a geographic location made an exception necessary. Within the battalions a rigid centralization had already been accomplished, thanks to the existence of the evaluation companies. These companies were in agreement with Referat B as to the fundamental aim of combat intelligence, namely, a knowledge of the deployment and organization of the enemy's air forces.

In general each battalion developed independently, according to the ability of its commanding officer and his close advisers. In the conscientious compilation and exploitation of all possible intelligence, the 1st Battalion was far ahead of the other two. Its highly talented commander, Captain Rueckheim, devoted himself to the task of thoroughly covering the British and American heavy bomber units and plotting their routes. He early recognized the wide scope of the SIS and the Radar Service, and made full use of them. The monitoring of heavy bomber units was a field in which the Reich defense organization was also very greatly interested. Fliegerkorps XII, which later became Jagdkorps I, took care of the defense of Germany. Thanks to the alertness of the commanding officer, the battalion was given special consideration in matters of construction materials, wire, etc. The aircraft warning and plotting system developed in Meldekopf 1 was an exemplary one, and following the creation of the ZAF, was adopted by all SIS-units.

At first the poorly commanded 2nd Battalion was not capable of

TOP SECRET

TOP SECRET

setting up its own Meldedopf. Its companies established individual command posts which passed their reports to Meldekopf 1. The jamming company also worked independently of the battalion, its jammers being deployed along the coast for use against British ground radars.

The least changes occurred in the case of the 3rd Battalion which continued in its accustomed manner of working.

5. Evaluation

The form of messages and reports was fixed. Sometimes, in a specified sector, reports covering a longer time period were made in order to clarify a certain event or to prevent certain developments.

6. Signal Communication (See Figure 11)

As the diagram showing the liaison and message channels for 1942 indicates, the wire system was further expanded. In addition to the individual teletype lines within the companies, several telephone lines were available, most of them running from the switchboards of the evaluation companies to the intercept companies. Likewise there were one or two lines to the SIS liaison officers at headquarters. The diagram does not take into account the various direct lines from the companies to the SIS-liaison officers, the purpose of which was to achieve a minimum of delay.

The whole construction of the communications network was founded on the principle of passing on intercepted traffic as quickly as possible. A delay of more than two minutes could not be tolerated.

This considerable expansion made necessary the building of large telephone centrals:

TOP SECRET

TOP SECRET

- Exchange "Pirate" - Meldekopf 1 of the 1st Battalion
- Exchange "Breakwater" - Radar Intercept Center West of the
2nd Battalion
- Exchange "Clairvoyant" - Evaluation Company of the 3rd Battalion,
and also the regimental exchange.

The regimental exchange finally comprised 5-6 FD 16's (switch-boards) with about 150 trunk lines and 250-300 local drops.

In addition to the normal company telephone centrals, in the case of the 8th Company and the 5th Company, D/F control communications had to be installed.

The regimental teletype central had 6-8 lines to the Luftwaffe exchanges, in addition to lines to the companies and SIS-liaison officers. There were three teletype-cipher machines for top secret messages; and 8-10 for secret communications. Altogether, about 500-700 teletype messages were handled daily.

7. Liaison with Units and Headquarters (See Figure 11)

The liaison of the individual evaluation stations with other units and headquarters varied greatly. In the case of the 1st Battalion its forces were concentrated. The operational and tactical work was incorporated in Meldekopf 1. Since command of the defense of Germany was in the hands of Fliegerkorps III, whose presence in the area made it unnecessary to send liaison officers either to that Headquarters or to its divisions, the company commander and his assistants advised these headquarters from the Meldekopf. It was only necessary to assign an officer to Luftflotte Reich to protect signal intelligence interests

TOP SECRET

TOP SECRET

there. An SIS-liaison officer was likewise assigned to the Fighter Command in Holland.

The 2nd Battalion was unable to furnish its own SIS-liaison officers. The reports of this battalion were either passed to Meldekopf 1 or sent directly to the appropriate SIS-liaison officers. Later, a separate message center for radar reports was set up in the Meldekopf 1 area (Korfu North).

The liaison officer sent to Luftflotte 3 Headquarters by the 3rd Battalion did the staff work. He had to compile A-2 reports in addition to those of the individual SIS-stations, and he had to contribute to the daily combat report. In ways his work competed with that of certain technical staff advisers on the Luftwaffe Operations Staff.

Because of the feebleness of the regiment, the SIS-liaison officers were able to set up their own channels for operational messages. They received reports directly from the intercept stations, D/F controls, and radar intercept stations; this should have been the duty of the Meldekoepfe. In this way the regiment, in the course of time, lost much face with headquarters, and the well-conceived unity of the SIS was weakened.

The SIS-liaison officer with the Atlantic Air Command was actually an officer from the 16th Company in Brest, which dealt with the RAF Coastal Command. Here less importance was attached to the general air situation and the growth of the enemy air forces than to the operations of the Coastal Command in the Bay of Biscay and the Atlantic.

TOP SECRET

TOP SECRET

Liaison with the SIS of the Navy was taken care of at Luftflotte Headquarters. The Navy was very timid, and for a long time had prohibited telephone conversations concerning matters pertaining to the SIS. In the early years of the war, messages from the British air raid warning network "Nora", enciphered in "Loxo", contained good clues for predicting air raids.

V. Situation in the Middle of 1944; Beginning the Invasion (See Figures 12 to 16 incl)

1. General

In the two years previous to the invasion, further expansion had taken place. From a very modest start a radio intelligence agency for the defense of Germany had been created, its mission being the plotting of aircraft and radar monitoring within Germany proper.

Thus the SIS was always able to give an appreciation of the American and British air forces based in Great Britain. It became a very essential component of the German defense system, and of the German Fighter Command.

2. Organisation

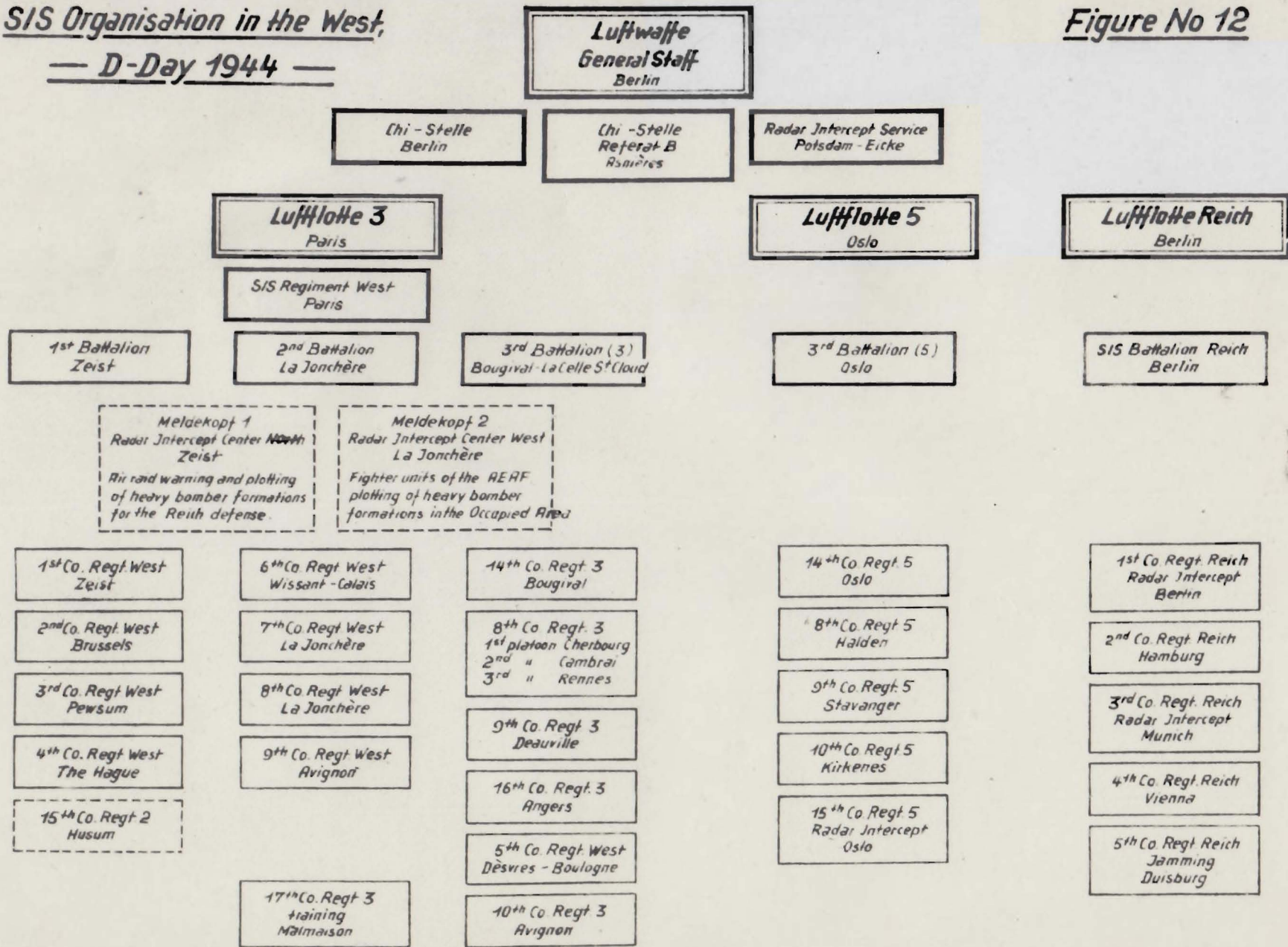
Although the battalion in Norway also had, in the course of time, to turn to the East (an R/T station at Erloeserberg, opposite Murmansk, and stations in Finland), its chief task, however, remained the monitoring of 18 Group of Coastal Command, for the protection of the German convoy route along the west coast of Norway. The fixed SIS station in Husum was the connecting link between the W-Leitstelle 5 in Oslo and Meldekopf 1, in matters pertaining to heavy bomber raids. Organisationally, there were no important changes. In the event of an

TOP SECRET
-4-

SIS Organisation in the West,

— D-Day 1944 —

Figure No 12



-47a-

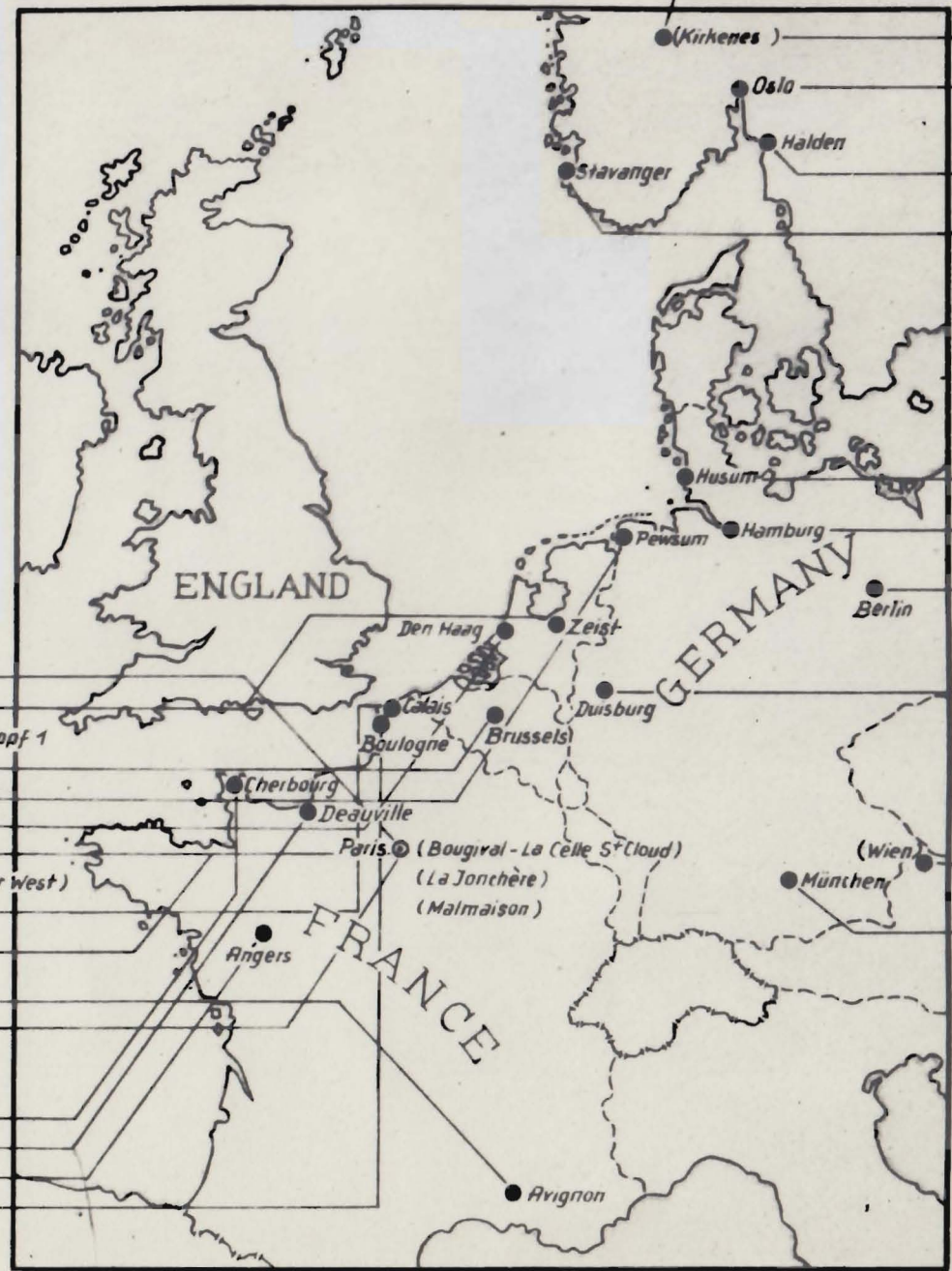
Geographical locations,
SIS units in the West,
— D-day 1944 —

1 Regiment
with 3 Battalions
 (total: 15 Companies).
 1 Battalion (Norway)
 (with 5 Companies)
 1 Battalion (Germany)
 (with 5 Companies)
 Total strength
 approx: 5000
 (1/3 of which women)

47b-

SIS Regt. West

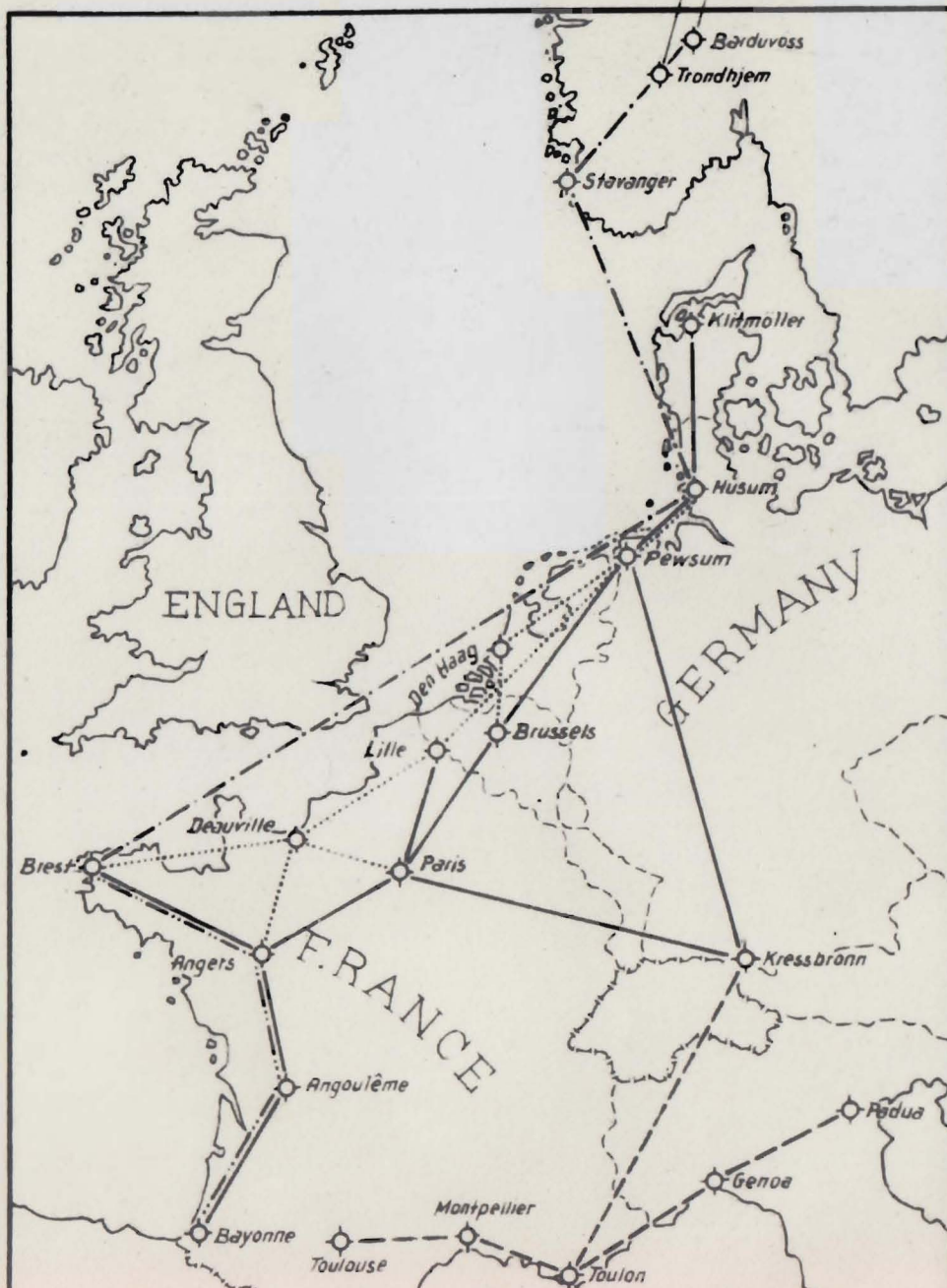
- 1st Battalion Regt West
- 1st Co. Regt. West evaluation and Meldekopf 1
- 2nd Co. Regt. West W/T
- 3rd Co. Regt. West W/T
- 4th Co. Regt. West W/T
- 2nd Battalion Regt. West
- (Meldekopf 2 and Radar intercept Center West)
- 6th Co. Regt. West Radar intercept
- 7th Co. Regt. West Radar intercept
- 8th Co. Regt. West jamming
- 9th Co. Regt. West Radar intercept
- 3rd Battalion Regt. 3
- 14th Co. Regt. 3 evaluation
- 17th Co. Regt. 3 training
- 8th Co. Regt. 3 VHF R/T
- 9th Co. Regt. 3 HF W/T
- 16th Co. Regt. 3 HF W/T
- 5th Co. Regt. West VHF R/T



- 10th Co. Regt. 5 HF R/T, W/T
- 3rd Battalion Regt. 5
- 14th Co. Regt. 5 evaluation
- 8th Co. Regt. 5 HF R/T, W/T
- 9th Co. Regt. 5 HF R/T, W/T
- 15th Co. Regt. 2 VHF R/T, HF W/T
- 2nd Co. SIS Battalion Reich
- SIS Battalion Reich HQ
- 1st Co. SIS Battalion Reich
- 5th Co. SIS Battalion Reich
- 4th Co. SIS Battalion Reich
- 3rd Co. SIS Battalion Reich

Figure No 13

HF D/F Operations
before D-day
 (at least 45-50 HF D/F's)



~ Legend ~

- D/F base line of the 14th Co. Regt. 3
- D/F base line of the 9th Co. Regt. 3 and the 4th Co. Regt. West against England
- - - - D/F base line of the 16th Co. Regt. 3 for the Bay of Biscay area
- - - - D/F base line of the 10th Co. Regt. 3 in the Mediterranean.
- · - · - D/F base line of the 3rd Bn Regt. 5 in Norway (also an extension of the base line of the 14th Co. Regt. 3)

Figure No 14

VHF D/F Operations
before D-day
 (at least 25 VHF D/F's)

-177-



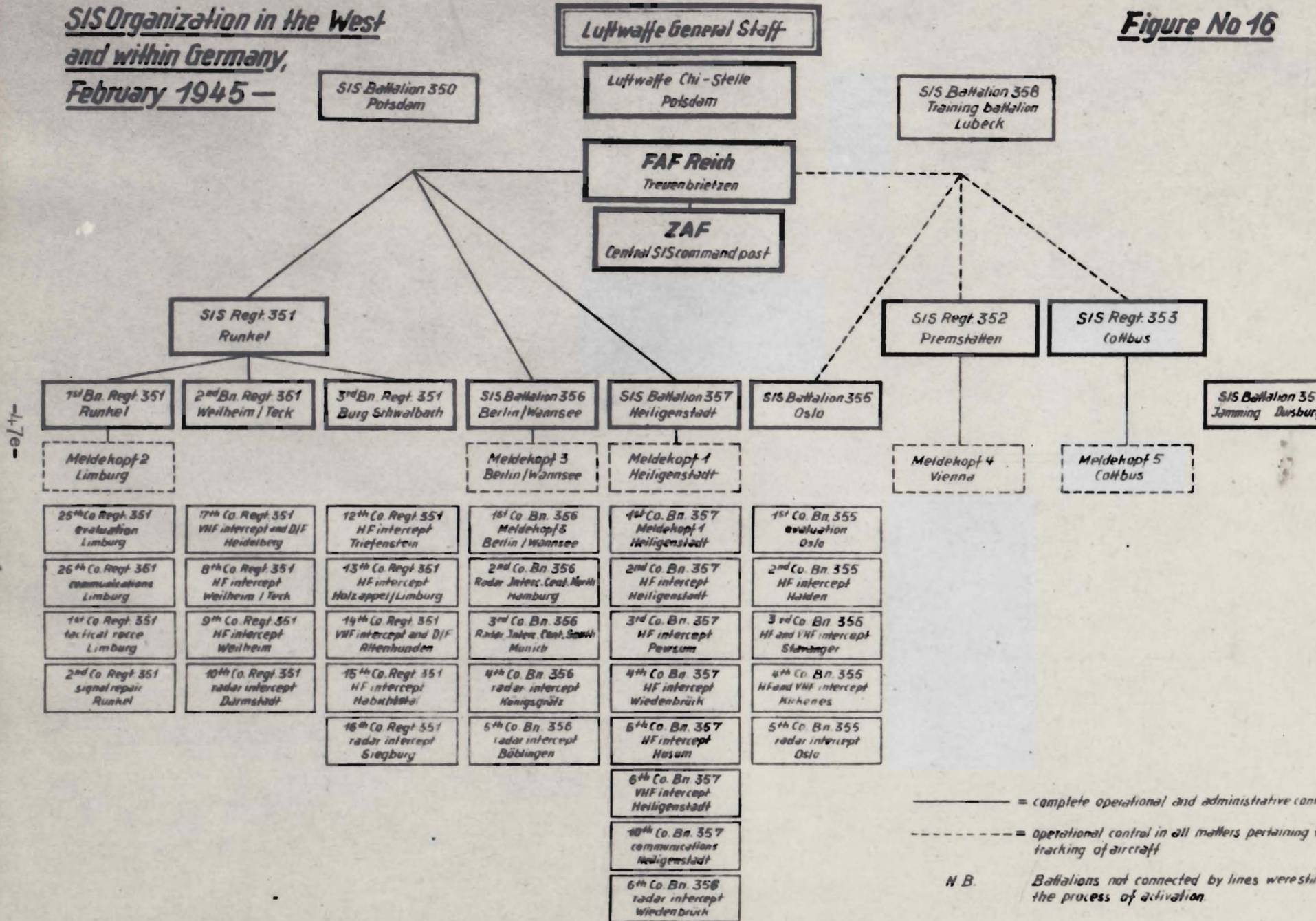
~ Legend ~

- ◊ — VHF D/F base line of the 8th Co Regt. 3
- ◆ — VHF D/F base line of the 5th Co Regt West
- ◊ — VHF D/F base line of the 1st Co Regt West
- ◊ — VHF D/F base line of the 10th Co Regt. 3
- — Radar Intercept Stations (to which R/T operators were also assigned)

Figure No 15

**SIS Organization in the West
and within Germany,
February 1945 —**

Figure No 16



TOP SECRET

invasion, the subordination of the SIS-station in Husum to the 1st Battalion of the regiment was provided for.

The SIS Regiment West carried out all signal intelligence assignments in the West. It maintained the opinion that only a single and closely-knit organization in the West could intercept and evaluate in a uniform manner.

The Luftwaffe Operations Staff and Luftflotte Reich, with an eye to the future, placed certain emphasis on the expansion of the defense system for Germany. The support given to the 1st Battalion in Holland, and the resources at the disposal of the SIS-Battalion Reich, surpassed by far those available to the units under Luftflotte 3 Headquarters.

Two questions were frequently discussed at this time:

- a) That of splitting up the Regiment into two battalions, one for the defense of Germany, and the other for operations on the front;
- b) That of subordinating the SIS, in whole or in part, to the Fighter Command.

Firstly, owing to the lack of qualified people in high headquarters who had an understanding of the situation, there was a separation of radio intercept from radar intercept. The regimental commander was unable to combine the radio and radar intercept platoons in his company, even though the Chief Signal Officer of the Luftwaffe was absolutely in accord with this principle. Individual incompetence, exaggerated sensibility toward the feelings of the battalion commanders, impassiveness, and reluctance to act prevented the exercising of any distinct influence, on the part of regimental headquarters. Only the

TOP SECRET

TOP SECRET

commander of the 1st Battalion had, in his area, provided for a concentration of all forms of signal intelligence, and was entrusted by the Reichsmarschall with the creation of a central signal intelligence flash report evaluation section (ZAF) in Treuenbrietzen, near Berlin. Unfortunately, the career of this successful officer, who was only 27 years old, and who had a select staff of assistants, was wrecked by the intrigues of the hoary old men of the Signal Corps.

Radio intercept stations were set up all over Germany proper with accelerated haste. They were used to plot the routes of heavy bomber formations which were laying waste German cities with increasingly heavy attacks.

Meldekopf 1 was originally created to serve Jagdkorps I. As its successes became more widely known, Luftflotte 3, which had meanwhile become only a bulky and parasitical headquarters with no end of generals and staff officers, also wanted to have a Meldekopf. Since a considerable part of the SIS regiment was stationed in Paris where the Luftflotte Headquarters was located, a second Meldekopf was created on the pattern of Meldekopf 1, out of the available resources of the 2nd Battalion. Meldekopf 2, in addition to plotting the routes of aircraft in the occupied area of the West, specialized in the cover of the Allied tactical air forces. Later, in Limburg, the enemy invasion air force was covered.

The enormous strain put on the signal communication system by the incessant enemy air attacks brought about that which the incapable regimental command had been unable to achieve; it forced the battalions to cooperate with each other. The 1st Battalion was again ahead of all

TOP SECRET

TOP SECRET

the others. Therefore those companies of the 3rd Battalion which had VHF sets had to intercept R/T traffic from heavy bomber formations for the 1st Battalion, and to place their large HF D/F network at the disposal of the 1st Battalion. Captain Rueckheim needed this network to D/F messages of the RAF giving wind conditions aloft over Western Europe. In Germany proper, Meldekopf 1 set up its own D/F organization with the help of the Safety Service Regiment Reich. Reference is made to Figures 14 and 15, which set forth, respectively, the HF and VHF nets existing from 1943 until D-Day.

The expansion of the radar organization within Germany necessitated the transfer of Meldekopf 1; this became urgent when Jagdkorps I moved from Zeist to Treuenbrietzen. Therefore the commander of the 1st Battalion, Captain Rueckheim, was entrusted with the creation of a central Meldekopf for Germany proper, the "ZAF". The ZAF was directly under the Chief Signal Officer of the Luftwaffe Headquarters, and had directional authority over the Meldekoepfe, and over the evaluation of radio intelligence where a uniform method of plotting raids was concerned. Until the problem was later solved it was a unique organization in the sense that its chief, Captain Rueckheim, was in certain matters the superior of his own regimental commander, to whom, as commander of the 1st Battalion, he was at the same time subordinate.

Since the beginning of 1944, two problems had come to the fore for the regimental commands:

- a) The closing down and withdrawal of out-stations concentrated on the Channel coast;

TOP SECRET

TOP SECRET

- b) The motorizing of fixed companies and platoons situated in areas which would probably become operational.

The regiment had a distinct order that, in the event of a move, there was to be no interruption in the work of the intercept companies or the Meldeskoepfe. All staffs had agreed also that the units of the regiment must be maintained in the event of a retreat on the part of the Headquarters. However, only after several months of discussions could a statement be obtained from the Commander-in-Chief in the West, authorizing the battalion commanders to give withdrawal orders to their units in the combat area. Only in the event of a definite local emergency could SIS personnel be pressed into combat.

Regarding the motor transport situation, the regiment was unable to obtain any further allotment of vehicles, in spite of the fact that it only had two fully mobile companies.

In the middle of 1944 the Reichsmarshal was considering placing radio intelligence directly under Luftwaffe Headquarters. Such a decision would have been welcomed by all members of the SIS, since it would have finally done away with the distinction between administrative and operational control, without essentially changing the existing units. However, Lt. Col. Friedrich, the SI-officer at Luftwaffe Headquarters responsible for tactical operations, refused the command of an SIS-Division which was offered to him; probably he did not feel equal to the responsibility which would devolve upon him. Therefore, administrative matters were placed in the hands of a non-specialist general, the result being that, until the very end, there was no change in the obscure relationships at the highest Headquarters, and that in case of

TOP SECRET

TOP SECRET

emergency, responsibility could be shoved onto others.

3. Strength

The strength of the personnel in the West had increased to approximately 5000 in the course of two years. A third of these were women. The regiment with its three battalions, numbered 15 companies. In addition there were two battalions with a total of 10 companies which were committed to the defense of Germany proper. (See Figures 12 and 13).

4. Operations

The strength of the companies varied in regard to personnel and equipment according to their tasks. Those companies engaged upon W/T interception had from 20-60 radio sets.

Direction-finders were concentrated in so-called D/F "villages" along the coast. Here were located the D/F's used for special company missions, as well as the D/F's of the large network used by the evaluation company of the 3rd Battalion.

In Holland and Belgium the only step taken was the preparation of alternate sites farther inland; the units stationed in Brussels and The Hague were allowed to remain there. In France, on the other hand, the 16th Company moved from Brest to Angers, parts of the 8th Company from Urville to Cambrai and Rennes. In case of necessity the 9th Company was to withdraw to Paris. In Southern France the Radar Company and the 10th Company moved from Montpellier to Avignon.

After the landing of the Allies in French North Africa, and the occupation of Western France, the 10th Company had transferred from the Channel coast to the South of France. In the middle of 1943 a VHF

TOP SECRET

TOP SECRET

R/T platoon was sited above Monte Carlo to monitor fighter units and later on the Tactical Air Command. The primary mission of the company was to monitor enemy air activity in the Western Mediterranean, especially in the Gulf of Lyon. Working with the SIS battalion in Italy, it was intended to be a warning center for raids of heavy bombers on Southern France. The Radar Company was activated but never became operational. The evaluation of their results should have been fused with that of the 10th Company.

5. Evaluation

Apart from the outstanding, independent work done by the 1st Company, the evaluation company of the 1st Battalion, in reference to heavy bomber units, the leading element in the field of evaluation was Referat B, under the command of the very able 1st Lieutenant Becker. Very distinguished work was done by the Referat, particularly in the utilisation of captured documents and captured equipment. From time to time a report was published on navigational aids, which well represented the most mentally exacting and most highly esteemed evaluation work of the Signal Intelligence Service. It was edited by Inspector Weise and Master Sergeant Wyes.

The closest liaison existed between Referat B and the 5th Signal Intelligence Station, the Army evaluation center in France. Referat B also had permanent liaison officers (technical sergeants) at Dulag Luft in Oberursel, to whom it had had a direct line since the fall of 1942. The questioning of prisoners of war at Dulag Luft was greatly influenced by Referat B. In the Referat there were liaison officers

TOP SECRET

TOP SECRET

from German fighter, bomber, and reconnaissance units, who placed their operational experience at the disposal of the outstanding evaluators. Likewise, liaison people from the Weather Service and the technical bureau of the Luftwaffe were assigned to the Referat. The former chief of the daily report section in the Referat, Technical Sergeant Fastenbauer, was an SI-liaison officer for more than a year, and did similar work for the western section of the Luftwaffe General Staff.

The superiority of this Referat was finally so convincing that in the last few months before the invasion, the evaluation sections of the battalion discussed their reports and records with the section heads of the Referat. These reports were then issued in a uniform text, on the one hand by the Chi-Stelle to its distributees, and on the other by the battalion evaluation section.

6. Signal Communication (See Figure 16)

The creation of the Battalion Reich and the assignment of SI-liaison officers to the divisions of Jagdkorps I made numerous circuits necessary, both within Germany, and from Germany to the occupied territories. These wire requirements increased when the ZAF obtained an additional wire system.

In the beginning of 1944 radio stations were set up by the regiment at all out-stations, command posts, and companies. Each company had:

- a) A D/F control network, or a radio link with its out-stations;
- b) A radio link with its battalion;
- c) A radio link with the pertinent Meldekopf.

The Meldekoepfe were included, either in the D/F control networks, or in the radio links between companies and out-stations. In this way it was

TOP SECRET

TOP SECRET

provided that, in case of line trouble, all tactical reports would reach the Meldekopf as quickly as possible, and from there would be broadcast as signal intelligence flash reports to interested headquarters. The code used by the Meldekopf for these flash reports consisted of a code book of 1000 meanings. These encoded messages were deciphered with the appropriate cipher table and sent out on both long wave and short wave as 5-figure groups. The cipher systems of Meldekopf 2 were held by the Army as far down as division.

The extensive construction of D/F and radar intercept stations, both in Germany proper and in the occupied territories, made it impossible for each of the regiment's 176 out-stations and the 60 out-stations of the SIS-battalion Reich to have its own direct lines. For this reason the "Dante", or operational connection was introduced for the SIS. Upon use of the code-word "Dante" any conversation taking place over normal Luftwaffe circuits could be terminated and the line used for passing tactical reports for the duration of an air raid or other engagement.

7. Liaison with Units and Headquarters (See Figure 16)

At the same time that the Jagddivisions were created within Germany proper, SI-liaison officers were assigned to them. It was no longer conceivable for a Luftwaffe tactical staff to be without such a liaison officer.

Liaison with Army and Naval headquarters could be performed by broadcast in the event of line trouble.

The winter of 1943 and the first half of 1944 were entirely under the influence of the impending invasion. In the fall of 1943 a

TOP SECRET

TOP SECRET

large, preconceived map exercise was performed for the operations officers of headquarters staffs, particularly for the purpose of instructing the Army in the possibilities of liaison with the Luftwaffe SIS. It was intended to give not only an insight into the working methods and message channels of signal intelligence, but also to portray the initial stage of an invasion, and the difficulties that would thereupon arise for the SIS.

The concluding of invasion preparations in England was accurately covered and reported. During the night before the invasion, Meldekopf 2 was able to give a first warning about 2300 hours, naturally without making the definite statement that the invasion was actually beginning. By 0100 hours in the morning it was clearly realized that a rather large undertaking of a special nature had begun.

VI. Course of the Invasion

Shortly before the beginning of the invasion the installations on the Channel coast for jamming British radar were completely destroyed. D/F's and radar intercept sites were also the individual targets of fighter bomber attacks. During the night before the invasion the intercept station of the 8th Company was smashed to bits by a large scale attack of the RAF Bomber Command. Fortunately, the company had already moved. The casualties from these attacks were surprisingly small. In the attack on Urville only one man was wounded.

On the day of the invasion the last platoon of the 8th Company withdrew to Paris, the 9th Company moved from Deauville to its alternate position near Saint Germain, a suburb of Paris. D/F's and out-stations in the operations zone withdrew to the nearest headquarters,

TOP SECRET

TOP SECRET

after demolishing their equipment. Only a radar intercept station east of Cherbourg remained at its post, as ordered. The complement was taken prisoner after the fall of the fortress. One of its men had the good fortune to escape from Cherbourg harbor in a ship. He gave a report of last events in the besieged fortress. The transmitter of the radar intercept station remained serviceable to the last, and continually sent reports on the ground situation through the regiment to Luftflotte 3 Headquarters. After the occupation of France by the Western Powers, the RAF Bomber Command refrained from switching on its airborne "Magic Box" equipment until the aircraft had reached a longitude of 03 degrees East, thereby depriving the SIS of a source of advance warning. This was attributed to the statements of prisoners taken from this radar intercept station. After the break-through at Avranches, the 16th Company, and also the D/F stations on the Atlantic coast, were ordered back from Angers to Paris. As further advances were made on Paris, the entire regiment moved in a leap-frog operation to Wich, east of Nancy. Referat B attached itself to the regiment. After a short stay in Lorraine, the bulk of the regimental units finally assembled in the area of Limburg-on-the-Lahn, the 3rd Battalion in the Freiburg area, the 1st with Meldekopf 1 in Wiedenbrueck.

Since vehicles had not been made available despite the remonstrances of the regiment, and since the leadership had been found wanting as usual, a great part of the equipment had to be demolished in the stations and camps. It was only by chance that 60 trucks in Wich, loaded with equipment, did not fall into the hands of the enemy. About 300 receivers were lost during the retreat. The incapable regimental commander was

TOP SECRET

TOP SECRET

finally removed, but was immediately entrusted with the command of another regiment.

In Limburg, finally, the concentration of several evaluation sections in one place led to the creation of a single, large, regimental evaluation unit. Referat B, after giving up a large part of its personnel to the newly activated air support parties, was absorbed into the new evaluation unit, at the same time retaining its individuality and claim to leadership. So, finally, what was accomplished under pressure of necessity amounted to nothing more than should have existed from the inception of the regiment.

The withdrawal in France had shown that the liaison between air and ground units was insufficient. For this reason VHF detachments, similar to the Anglo-American prototypes, were set up with advanced headquarters. VHF detachments were also created for the protection of airfields of individual fighter Geschwader.

Other detachments were sent to Army and Army Group headquarters to take the signal intelligence broadcast from Meldekopf 2. SI-liaison units were distributed according to the importance of combat sectors. They also passed their reports to Meldekopf 2, which, in turn, serviced them with collateral intelligence.

While the regiment was occupied with its wearisome reorganization in a location on the western border of Germany to which it had retreated, a new organization for signal intelligence was surprisingly adopted by the High Command. The regiment was placed for operations under Lt. Col. Friedrich of the Chi-Stelle, and for administration under Brigadier General Klemme, the Chief Commander. A third post was created in this

TOP SECRET

TOP SECRET

PART FOUR

THE FUNKAUFKLAERUNGSFUEHRER REICH (FAF)

by

COLONEL HANS FORSTER,

CHIEF, SIS, REICH DEFENSE

1. General

The events leading to the establishment of the Funkaufklaerungsfuehrer Reich within the scope of the Reich's defense, can be appreciated only by those familiar with the evolution of air policy throughout the entire war.

The flak artillery derived its information concerning the air movements of the enemy from the ground observer service of the old type (visual and acoustic). It supplemented that service with its own troop units of ground observers, and later on with its own radar.

The fighter air arm was first employed for the Reich's defense in 1940, after the French capitulation, as the Night Fighter Division. It derived its knowledge of the enemy from the data furnished by the ground observer service as well as its own radar. In 1941, the night fighters first began using information furnished by the Signal Intelligence Service. The results of this collaboration were, with respect to intruder sorties, exceptionally good. Unfortunately, the intruder sorties were stopped, but for unknown reasons. In the case of ordinary night fighting the Signal Intelligence Service was not very helpful in those times.

In the year 1942, on account of the changed air situation and in order to speed up communications, a subordination of the ground visual

TOP SECRET

TOP SECRET

new organization, that of "Funkaufklaerungsfuehrer Reich" (Colonel Forster), having jurisdiction over the ZAF and the organizations feeding into it.

The story of the further development of signal intelligence in the West, as well as in Germany proper, has been compiled by Colonel Forster himself.

TOP SECRET

TOP SECRET

observer service to the Jagddivision, that was in the meantime established, was requested. Further grounds for this subordination were shown by the possibilities of radar jamming. Failure of the radar in those times would have resulted in night fighters being grounded. But these claims for subordination were rejected by the higher staff.

For the ground visual observer service this subordination would have meant modernization by combining it with radar. But by the direction of such a great organization, and the fulfillment of all its tasks for other units, the fighter arm would have been diverted from its proper task; that is to attack the enemy in the air. This happened indeed in 1944.

The Reich's defense, directed by the Befehlshaber Mitte (Commanding General for the area of Germany) reposed, with respect to the fighter arm, in the hands of the XII Fliegerkorps that had been established; and the Flak arm rested in the hands of the Luftgau. The ground visual observer service was in the hands of the Luftgau also.

In consequence of the diverse mishaps in fighter warfare during 1944, the Reichsmarschall ordered the immediate subordination of the ground visual observer service to the fighter arm, and at the same time its remodelling by consolidation of the ground visual observers and radar. This was accomplished in the summer of 1944 under great difficulties, especially those having to do with the wire communication nets.

But the action was not sufficient. Increasing enemy raids, day and night, made it necessary to use other instrumentalities for tracking. At first each single command tried to help itself. Luftgau VI, Munster in

TOP SECRET

TOP SECRET

Westphalia, created, in order to protect the Ruhr area, a special radio center with some radar stations. The Luftflotte Reich began the construction of a radar net all over the Reich area.

More and more a unified command for tracking purposes became necessary. The fighter arm that had an ascendancy in the Reich defense claimed the right to give directives to the Signal Intelligence Service. Later on it reached out and brought the Signal Intelligence Service of the West and South under its command in every respect. The peril to the Signal Intelligence Service of being split up was very great, for the Luftflotten battled to retain their hold upon it.

2. Establishment of the "Funkaufklaerungsfuehrer Reich"

The Chief Signal Officer of the Luftwaffe, General Martini, decided to recognize the claims of the fighter arm to the greatest extent, and he proposed the creation of the office of the Funkaufklaerungsfuehrer Reich, but was not inclined to subordinate the entire Signal Intelligence Service; that as a whole worked for the higher command also. Therefore the Funkaufklaerungsfuehrer Reich was put under the Chi-Stelle for operational purposes, and was adviser to the Commanding General of Jagdkorps I. Besides this, a new post was created, "The Chief Commander of the Signal Intelligence Service". This post, in that form was entirely superfluous. An inspector of the Signal Intelligence Service would have been quite sufficient. Proposals to abolish the post were however rejected.

Between the "Chief Commander" and the Funkaufklaerungsfuehrer Reich foreseen friction very soon arose. It developed out of problems incidental to chain of command and staff relations. The Chief Commander of the Signal Intelligence Service was with respect to subordinate units only

TOP SECRET

TOP SECRET

an administrative and not an operational commander. The Funkaufklaerungsfuehrer Reich was operational chief of all Meldekoepfe; and for those units that worked against the Western Allies, administrative commander too. A proposal of the Fundaufklaerungsfuehrer Reich to make him chief of the units of the East and the South in every respect was rejected for the reasons given above.

3. Duties of the Funkaufklaerungsfuehrer Reich

- a) He was responsible for the tracking of the enemy's strategic air forces. He was directly under the Chief Signal Officer of the Luftwaffe (OKL, General Martini), who gave his commands and orders through the Chi-Stelle (Col. Friedrich). In the matter of military decision the Funkaufklaerungsfuehrer Reich was subordinate to the Chief of the Signal Intelligence Service (General Klemme).
- b) He was adviser to the Commanding General of Jagdkorps I, which was responsible for the Reich's defense. His command post (ZAF) was therefore near the command post of Jagdkorps I.
- c) He was responsible for the functioning of the Signal Intelligence Service in the West; and
- d) He was responsible for the direction of the entire jamming service within the area of Germany.

4. The staff of the Funkaufklaerungsfuehrer Reich

Upon the suggestion of the Funkaufklaerungsfuehrer Reich himself, his staff was held to a minimum in number and was organized as follows:

- a) The FAF Reich
- b) A-3, the Operations Group: two officers
 1. one officer, signal intelligence, in the Western area.

TOP SECRET

TOP SECRET

2. one officer, signal intelligence, in the area Germany.
- c) A-2, the Intelligence Group
- This section never was organized. Its functions were performed by the evaluation section of the ZAF.
- d) A-1, the Personnel Group, one officer, at the same time adjutant of the FAF Reich
- e) The Jamming Service: two officers
- In charge of the jamming service in the area Germany.

Note:

I myself (Col. Forster) was surprised at my nomination to this post of FAF Reich. This came about following a call at my office of the Chief Signal Officer. I had had no prior experience in the Signal Intelligence Service. Apparently my selection was due to the recommendation of the Commanding General of Jagdkorps I, with whom I was acquainted through my service in the Air Ministry, and with whom I again came into touch in the course of the reorganization of the ground visual reporting service. Then to until the autumn of 1942, I had been signal officer of Jagdkorps I. My selection was no doubt also due to my special knowledge of the tracking done by the ground visual reporting organization.

5. Organizational Measures (See Figures 17 and 18)

In the autumn of 1944, the Signal Intelligence Service had to wrestle with great difficulties. It had lost its advantageous positions in France, Belgium and part of Holland. It was also to be assumed that Signal Intelligence Service personnel that had been captured following the Allied invasion had divulged information to the enemy. This seemed

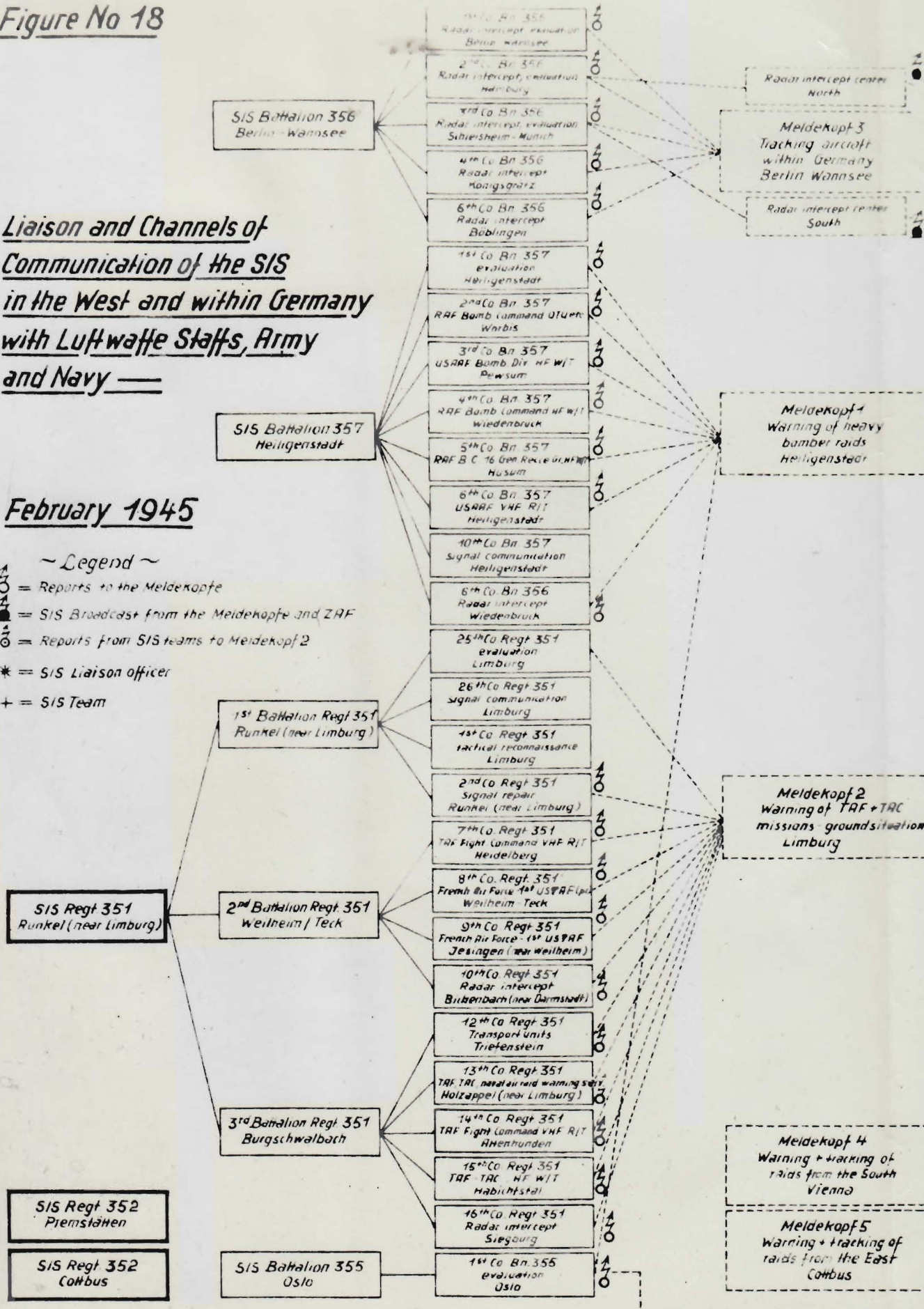
TOP SECRET

Figure No 18

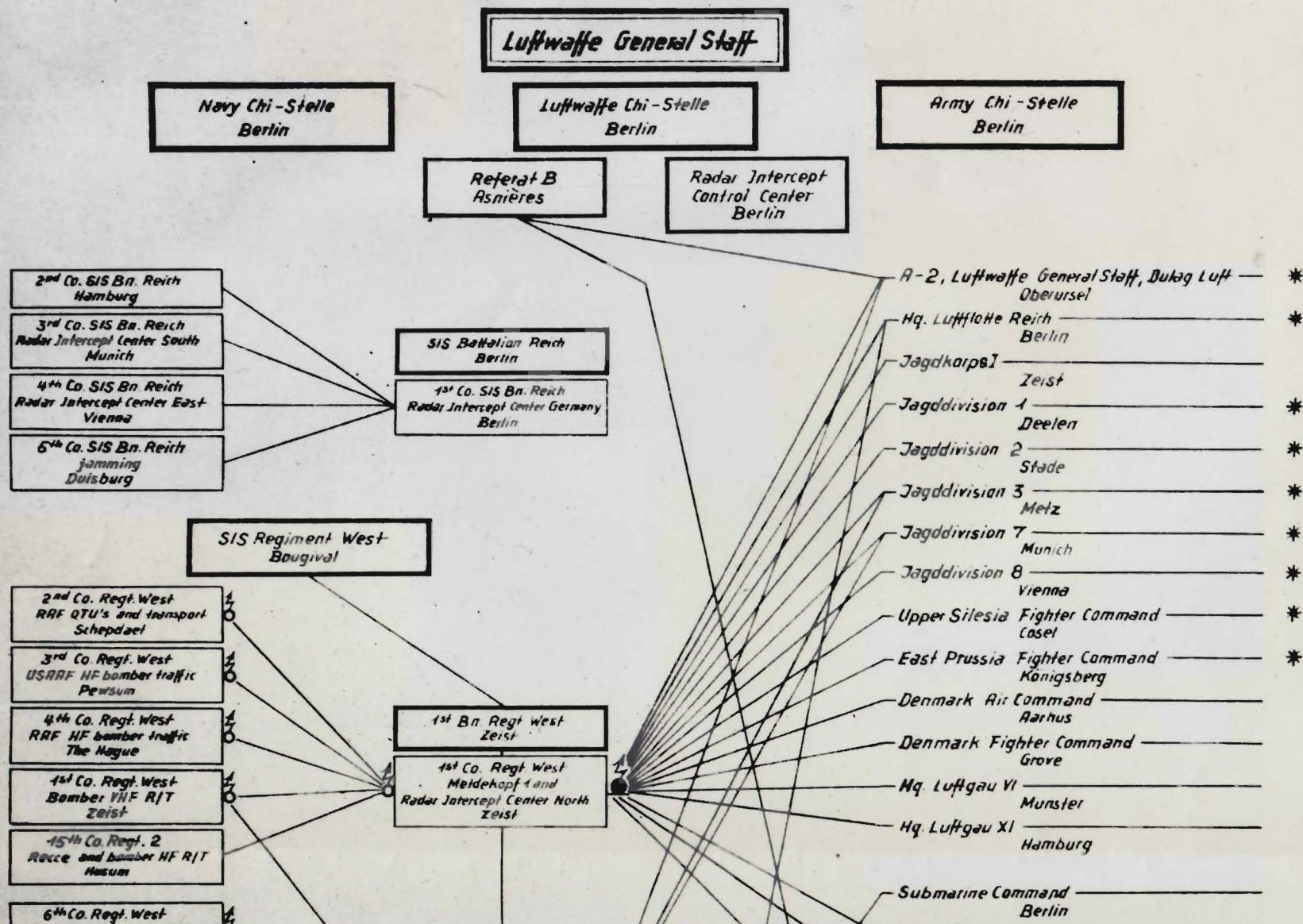
Liaison and Channels of Communication of the SIS in the West and within Germany with Luftwaffe Staffs, Army and Navy

February 1945

- ~ Legend ~
- = Reports to the Meldekapfe
 - = SIS Broadcast from the Meldekapfe and ZAF
 - = Reports from SIS teams to Meldekopf 2
 - * = SIS Liaison officer
 - + = SIS Team



Liaison and Channels of Communication of the SIS in the West and within Germany, with Luftwaffe, Army, and Navy Staffs, D-Day, 1944



-64a-

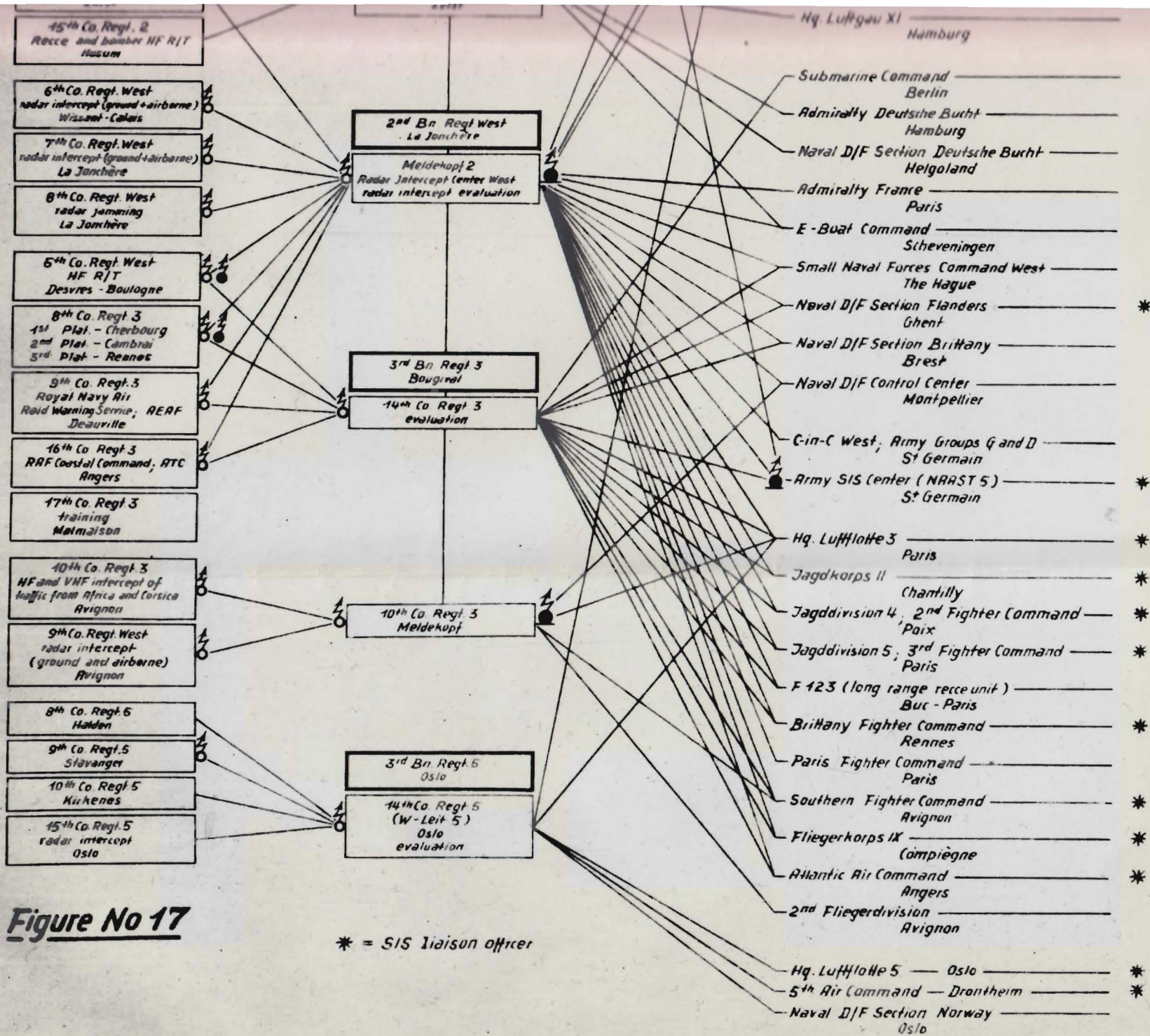


Figure No 17

* = SIS liaison officer

TOP SECRET

the more so to be true since the British had become much more cautious in their radio traffic. Meanwhile the Americans caused no additional difficulties.

The Commanding General of Jagdkorps I demanded however that early warning of approaching enemy aircraft, especially by night, such as had previously obtained, must continue despite the loss of the French and Belgian sites.

To accomplish this objective, the FAF took the following immediate measures:

- a) Construction of advanced radar stations on the line: The Vosges - Lorraine - Trier;
- b) Reinforcement of the radar stations on the Dutch coast;
- c) Construction of a new line of radar stations on the right bank of the Rhine;
- d) Reorganization of the Signal Intelligence Service of the West;
- e) Redistribution of tasks among individual units of the Signal Intelligence Service.

The Chief Signal Officer was further requested to increase the number of radar observer companies, since the commanders of existing companies were unable to control the numerous small radar stations in existence.

Officers, non-coms and privates of the Signal Intelligence Service were asked for proposals, and competition in this direction was encouraged. The response was good. Many useful suggestions were received.

By consultation with the Commanding General of Jagdkorps I, it was definitely decided that the Signal Intelligence Service would be charged exclusively with the tracking of the enemy bomber units. No particular interest was attached to enemy fighter cover. Nevertheless

TOP SECRET

even in this respect all measures were taken to use available information to the best advantage.

After the first measures were taken, reorganization of the units in the West was begun. The active support of the Army and flying units of the Air Forces in the operational area had to be secured. It was the main task of the 351st SIS Regiment (West) to furnish tactical intelligence concerning the enemy air forces. After the detachment of the first battalion from the regiment, a new and rather complex reorganization was necessary. A newly founded first battalion, to replace the one detached, got besides its analysis company, a W/T company and above all a tactical company into which was gathered all the air support parties in the operational area. Finally, the fourth company was a technical one.

The old second and third battalions were more adequately organized, and increased by further companies. A fourth battalion that was in process of organization at this time was also detached and assigned to Luftflotte Reich and later on was made part of the Signal Regiment Reich, and called Battalion 359. These peremptory measures were salutary, for only the Signal Officer of Luftflotte Reich had the means to construct the numerous jamming sets.

The second battalion operated for the most part between the River Main and the Swiss frontier. The third battalion between the River Main and the North Sea, though single intercept and D/F stations covered a greater area overlapping each other. For tracking purposes in the area Germany, the battalions 356 and 357 were responsible. Battalion 356 was assigned still other tasks. (For organizational details and location see Figure 17).

TOP SECRET

TOP SECRET

Upon the suggestion of the FAF a renumbering of the Meldekoepfe took place. Control stations established for tracking purposes aside from those of the Meldekoepfe were further developed.

This was the new numeric designation and assignment of the Meldekoepfe after organization of the ZAF:

Meldekopf 1: Located in Wiedenbrueck. Moved in autumn 1944 to Heiligenstadt. Belonged to the Independent SIS Battalion 357.

Meldekopf 2: In Limburg. Belonged to the SIS Regiment, West.

Meldekopf 3: In Berlin. Belonged to the Independent SIS Battalion 356.

This Meldekopf also had three radar control centers (Korfu)

Korfu North : Located in Schlawe near Hamburg

Korfu East : Located in Cosel in upper Silesia

Korfu South : Located in Schleisheim, near Munich

Meldekopf 4: In Vienna. Belonged to SIS Regiment, South

Meldekopf 5: In Warsaw; moved in summer of 1944 to Cottbus, south of Berlin. Belonged to the SIS Regiment, East.

Similar to the SIS evolution in the West, the radar in the area Germany enjoyed its own evolution parallel to that of the SIS. Therefore radar intercept centers were established to which all radar D/F'ings were reported and there evaluated. Later on, for administrative purposes, these radar Meldekoepfe were placed under the command of Battalion 356.

As the situation on the Western front was always changing, the commander of regiment 351 had great independence wherein interception and analysis were concerned. That was necessary in order to avoid any delay in emergency. Upon order of the FAF, the regimental commander was his deputy at headquarters of the C-in-C West. He was enjoined to the

TOP SECRET

TOP SECRET

closest collaboration with the other units of the air forces (Flak Corps, Jagddivisionen and the Army, which was performed in an exemplary fashion.

With the aid of the regiment, observations of enemy radar situated in France and Belgian proved immediately fruitful, especially in the improvement of our tracking of Allied aircraft.

It is still to be mentioned that Meldekopf 1 played a special role with the Fliegerkorps XII, and later Jagdkorps I. The commander of the first battalion of the regiment West, later on the independent battalion 351, recognized very clearly that the radar observation service would assume ever greater importance for the fighter arm and prepared the Meldekopf accordingly for such evolution. Concerning this later creation of the ZAF, more will be said subsequently.

Meldekopf 1 as the oldest of the Meldekoepfe became the model after which all the others were fashioned. Meldekopf 1, moreover exercised an ascendancy over the other Meldekoepfe through the ZAF by reason of the fact that all the key personnel serving the latter had been drawn from Meldekopf 1.

Conflict arose between ZAF and the FAF on account of the tracking of allied fighter cover, as the enemy air raids became more and more intense, the interwoven bomber streams covering the area Germany from the West and South simultaneously, it was technically impossible to fix in verbal announcements all the intelligence flowing into the operations room of the ZAF. Therefore a decision had to be made whether to concentrate on reports of bombers or of fighters, since both could not be handled at one and the same time. The FAF insisted on tracking both fighters and bombers, because of the importance fighter-tracking repre-

TOP SECRET

TOP SECRET

sented in determining intended targets. The predilection by training and tradition of the ZAF personnel however was for bomber-tracking. The ensuing friction resulted in the relief of the commanding officer of the ZAF, Lieutenant Hickmann. The problem however was never solved, the moreso since our intelligence facilities were rapidly smothered under the accumulating weight of air power turned against us.

Meldekopf 3, and its three radar intercept centers, were at a disadvantage compared to the corresponding battalions of the Western regiment, because battalion No. 356 was a recent creation and its personnel lacked experience. Improvement of its standards was a primary objective of the FAF. By transfer in of experienced personnel an improvement was soon noted.

The collaboration with Meldekopf 4 became ever more important. The raids from the South increased in number and penetrated deeper and deeper into Germany. If the results were not always satisfactory, the same was due in the main to disturbance of the long wire lines. But it must be said that surprises out of the South rarely occurred.

With Meldekopf 5 there was little collaboration on the part of the ZAF, because the Eastern front contained no strategic air force activity of any importance.

In connection with the reorganization of the Western Signal Intelligence Service, there was a review covering all radar intercept stations. Thanks to the supply division of the super-organization, which had passed from the control of the Luftwaffe to the Speer organization, the securing of the necessary station construction material proved extremely difficult. Difficulties were aggravated by endless red tape. More and more increased the demand for technical field equipment. To a degree, Regiment

TOP SECRET

TOP SECRET

351 was able to help itself, but Battalion 356 was helpless. The establishment of the separate radar observation posts in the area Germany often required several months in spite of the utmost urgency. The special radar center of Luftgau VI that functioned to the last, developed the Naxburg radar set. This set had several advantages compared to the Korfu set used in the Signal Intelligence Service. In spite of this fact, its introduction met many difficulties. The Signal Intelligence Service mistrusted anything that did not originate with them. Only at the end of 1944 were the advantages of the Naxburg generally acknowledged, and its introduction, even into the ground observer organization, pushed to a great extent.

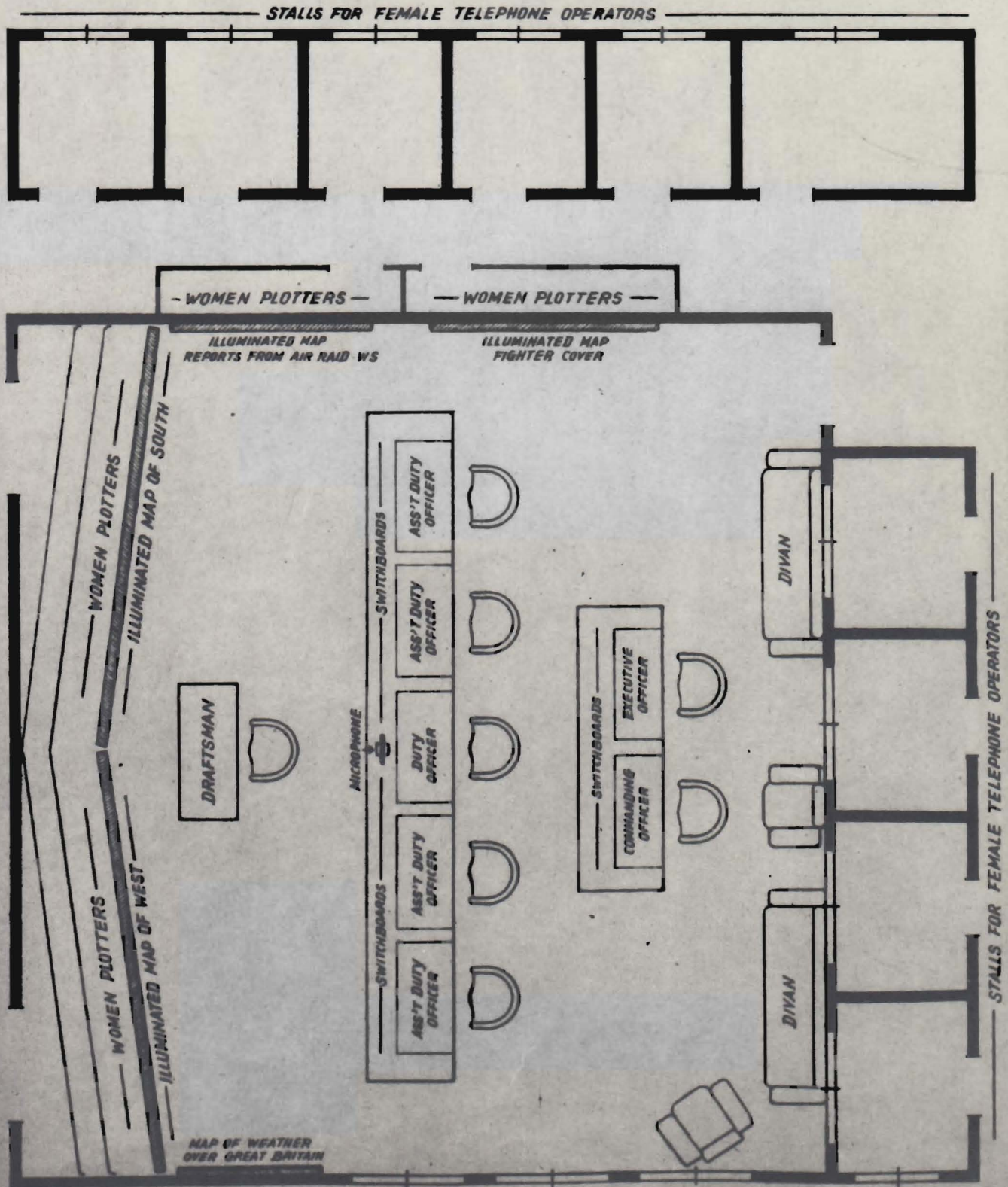
6. The Central Meldekopf for Germany (ZAF) (See Figures 17, 18 and 19)

With the transfer of the command post of Jagdkorps I to Treuenbrietzen, near Berlin, it became necessary to establish there signal intelligence facilities that would summarize and integrate the reports and information available from all the Meldekoepfe, that is all the SIS flash reports. Through the efforts of the commanding officer of the Independent Battalion 357, Captain Rueckheim, a perfect instrument was shaped for this purpose. Extensive wire and radio communications nets from the ZAF to the Meldekoepfe, and even down to the radar intercept centers and outstations, were established. An adequate number of teletype channels were provided. An inter-office communication system between the command post of the Jagdkorps I and the duty officer of the operations room in the ZAF was installed, so that the closest contact was assured. The FAF usually remained at the command post with the commanding general in order to keep himself apprised of our own situation, and to fulfill the

TOP SECRET

Operations Room of the ZAF

Figure No 19



TOP SECRET

demands of the commanding general.

Similar efficient communication facilities were provided to the SIS liaison officers at the Jagddivisionen. If connections were broken on this special net, the tactical communications net was still available.

At the ZAF the current situation reports coming in from the Meldekoepfe were listened to. On the other hand, the Meldekoepfe, radar intercept centers, SIS liaison officers, and even the out-stations, were able to listen to situation reports of the ZAF.

Enemy aircraft tracking was the task of the Meldekoepfe. From here the fixes were transmitted to the operations room of the ZAF where the final tracking was projected. This was done on two illuminated maps, each of the scale 1:500,000, one being for the West, the other for the South. A special map, of the 1:1,000,000 served for the tracking of enemy fighter cover. To compare the SIS tracking with the results of that of the Ground Observer Service, a further map of the scale 1:1,000,000 showed the reportings of the command post of the Ground Observer Service. These maps, which were actually huge plates of glass on which the outstanding terrain features only were shown, were covered with the fighter grid markings. Different colors and symbols, not only identified the major enemy air units, but the source of the intelligence concerning them, as, for instance, R/T D/F'-ing, "Mickey" D/F'-ing, etc. All these D/F fixes were received by female auxiliaries, standing behind the maps and wearing earphones, who upon receipt of the messages proceeded to transfer the intelligence received to the maps, using varicolored paints for this purpose.

Stalls surrounded the sides of the operations room, each connected

TOP SECRET

TOP SECRET

by direct telephone line to the R/T platoons working on enemy traffic interception. Other female auxiliaries occupied these stalls, writing down all messages transmitted from the R/T intercept platoons, which messages were immediately passed on to the duty officer or his deputy. According to the importance of intelligence contained in these messages, their contents were passed on to the commanding general.

In the operations room, which was built in three levels, the work desks were arranged in two rows. On the first level sat a girl at a desk copying down on a gridded map the data appearing on the large illuminated maps. This was a permanent record retained for evaluation purposes, since the large map was regularly cleared to provide for the recording of new current enemy flights.

On the second level places were provided for the duty officer and his assistants, for the broadcasters, and the supervisors of the female auxiliaries. On the third level was located the command post.

The evaluators, mainly sergeants, were present for consultation in the operations room as the situation demanded. If, for instance, there were raids from the South, only specialists of the South were needed in the operations room; the others worked in the evaluation room of the ZAF.

The evaluation section of the ZAF prepared and distributed a twelve-hour report of the air situation over the Reich. Further it disseminated statistics and intelligence bulletins necessary to the operations of the out-stations. It determined the signs and symbols used to indicate air activity. On the walls of the evaluation section were maps and charts indicating the operational units of all the Allied Air Forces with latest strength reports and tables of organization furnished by the analysis

TOP SECRET

TOP SECRET

companies of the battalions. The personnel was few in numbers, but all especially qualified.

During air raids there was a continuous colloquy between the duty officer of the ZAF and the different duty officers of the Meldekoepfe, the former issuing directives to the latter. In these conversations doubtful reports and situations were immediately clarified. Likewise the duty officers of the Meldekoepfe gave continuous reports on the state of communications, effects of enemy jamming, and the operational status of the out-stations.

At 1800 hours each evening a conference was held, attended always by the FAF, at which the air situation over the last 24 hours was reviewed, and all matters of pertinent interest thoroughly discussed. The FAF advised the duty officers and evaluators of the immediate plans and intentions of the Jagdkorps.

The duty officer was especially occupied with the following duties:

- a) Discussions with the Chief of Staff or A-2 of the Jagdkorps concerning the current situation which was a play of question and answer;
- b) Control of the Meldekoepfe in their tracking of the enemy bomber and fighter units, and discussions with the duty officers of the Meldekoepfe concerning the same;
- c) Assignment of new tasks to the Meldekoepfe upon completion of their missions;
- d) Discussions with liaison officers of questions and problems arising within the Jagddivisionen;
- e) Rendering of personal reports on the air situation to the A-2 of the General Staff and to the Chief Signal Officer.

Provision was made for the continuation of the flow of intelligence

TOP SECRET

TOP SECRET

in the event of disablement of the ZAF in that the SIS liaison officers with the Jagddivisionen and important staff sections had direct communication links to a Meldekopf or a radar intercept center. The respective Jagddivisionen were thereby certain of being constantly informed of the enemy air situation at least in their particular and neighboring sectors. As the Meldekoepfe and the radar intercept centers had lateral communication with each other, it was fairly certain even during the heaviest air raids that communication would be maintained between them.

The command post of the chief of the jamming service was also in the ZAF. During air raids this officer remained at the command post of the Jagdkorps in order to keep himself informed concerning the intentions of the fighter arm. It was his special task to arrange that the jamming transmitters did not interfere with our own fighter operations. His orders were given through the following channels:

- a) The nets of the Reich Postal Service;
- b) The nets of the Jagdkorps and on special radio transmitters;
- c) Wire to the Luftgau Headquarters.

Orders to cease jamming required very little time to be acted upon. Difficulties never occurred. The chief of jamming prepared a daily report which comprised an exact listing of all enemy jamming that had occurred during the period covered in this area. This report was forwarded to the Chi-Stelle in Berlin. Data were supplied by the Jagddivisionen and the Luftgaue in accordance with a prescribed form. The considerable number of jamming sets existing made it difficult to secure the data for the reports in good time.

TOP SECRET

TOP SECRET

The ZAF was in operation 24 hours a day; only the duty officer changed three times daily; other personnel in the operations room worked a 24-hour shift, having each alternate day off. It was served by a company of 170 members, men and women both, and was divided into three platoons. There were 4 officers, 40 enlisted men, and about 120 female auxiliaries. The number of girls is explained by the large amount of work for which women were particularly adapted.

It was intended to exchange officers and evaluators as between the ZAF and the Meldekoepfe from time to time in order to acquaint them with over all operations, and to avoid one sidedness. These measures didn't eventuate. Both the officers and other personnel were excellently qualified in every respect. The successes of the fighter arm were due in no small measure to them, which was repeatedly confirmed by the commanding general.

Constant improvements in the organization of the operations room were accomplished. The technical equipment was continually developed to higher standards. Frequent visits of the commanders of flying units as well as general staff officers served to eliminate erroneous ideas about the SIS, and furthered co-operation between the various elements of the command. Every effort was made on the part of the SIS to meet the wishes of the flying unit commanders, and to anticipate requirements.

The Flak Divisions, which were charged with the defense of extensive areas, endeavored also to procure direct telephone lines to the ZAF or the Meldekoepfe; but it could be realized in a few cases only. But they suffered no disadvantage thereby since the Flak Liaison officers at headquarters of the Jagddivisionen were able to supply information of

TOP SECRET

TOP SECRET

the air situation as reported by the SIS to their units.

During the last month of the war some Gauleiters also endeavored to secure reports of the enemy air situation direct from the ZAF or the Meldekoepfe. These reports were supplied to them for their personal information in uncompromising form. The Gauleiters were thereby enabled to make security dispositions for short periods of time, as, for instance, in the protection of provisions and supplies in towns and cities threatened with air bombardment.

The SIS grew into the scheme of Reich Defense very easily and quickly. At the end of the war its resources were by no means exhausted.

7. Conclusions

First Question: Was the office of the FAF necessary?

It has been endeavored in the explanations above to give an outline of the development of the FAF in very simple form. From the moment that the military forces of the Reich were thrown upon the defensive, it became necessary to assemble such forces as were required for the defense of the Reich itself.

The SIS was an integral part of the Reich defense by virtue of its demonstrated expertness in aircraft tracking. Therefore its unified command was obviously in order. By the establishment of the FAF there was no diminution in the mission of the SIS which had always been that of supplying air intelligence to the air combat units and the Supreme Command. To the FAF came now the problem of balancing the demands made upon the SIS as between the Reich's Defense and other requirements, which he was always able to accomplish without loss of efficiency.

TOP SECRET

TOP SECRET

Even if our forces on the fronts in occupied territory had taken the offensive, a unified command of the SIS was still indicated as necessary because of the increasing strength and power of the enemy air forces. In any event the functions of the FAF were justifiable.

Second Question: Was the position of the FAF in the chain of command a proper one?

According to his title "Funkaufklaerungsfuehrer Reich", his operational function was to assure air intelligence over the Reich's area. So, just as he was subordinate to the supreme commander of the Reich Defense, in the same fashion all the SIS charged with the Reich Defense, had to fall under his command. His own bilateral subordination to the Chief of the Chi-Stelle (Col. Friederich) on the operational side, and to the Chief Commander of the SIS (General Klemme) on the administrative side, was superfluous.

Third Question: Was the summarizing of all sources of intelligence in the Reich Defense necessary?

This is to be answered in the affirmative without dispute. For this reason besides the SIS, the Ground Observer Service and reconnaissance units could be mentioned as sources of intelligence. However, the fact remains that aircraft reconnaissance was used very little if at all in the Reich Defense. The air situation picture was composed out of the efforts of the SIS and the Ground Observer Service, and enabled the Command to meet the enemy assaults with maximum effect out of the resources at hand.

TOP SECRET

TOP SECRET

Fourth Question: Was the ZAF necessary?

The establishment of the ZAF proved fruitful beyond doubt. There was not an air raid but demonstrated the need of assembling in one central point, and evaluating in an over all sense, all information gathered by the several Meldekoepfe. Likewise the defensive flying units were strengthened in their operations by the intelligence furnished to them, either by general distribution or on call, by the one central air intelligence organization. Besides the ZAF proved the exhibition piece of the SIS, thereby enhancing the latter's prestige. Whether the ZAF should have been made the central for all combat intelligence as it was for signal intelligence was a question that was no more than pondered.

Fifth Question: Was the incorporation of the jamming officer into the staff of the FAF proper?

In the field of jamming the enemy was at all times our superior. Because of the shrunken and tardy output of German industry it was impossible to meet him on similar footing in the use of these weapons. The evolution of jamming on our side was, comparatively speaking, in its infancy. Nevertheless it was carefully organized within existing means, and, properly exploited, promised ever greater successes. Its co-ordinated direction through a staff jamming officer was perfectly proper. As the employment of the jamming transmitters was a delicate operation and their turning on and switching off was at times a matter of a moment's decision, requiring co-ordination according to the air situation, and the intentions of the Fighter Command, ultimate results could be attained only if the jamming officer were a member of the staff of the FAF.

TOP SECRET

TOP SECRET

Sixth Question: What is required for an ideal defense of the Reich?

The introduction into warfare of rocket weapons, the evolution of which has but begun, and which holds many surprises in store, compels a revision in all ideas bearing upon the defense of an area.

In the defense of the Reich, which more properly may be called the Reich Air Defense, there should be observed, out of the experiences of World War II, the following principles;

- a) Representative of the Reich Air Defense is an Air Force;
- b) Military units on the frontiers committed to offensive action have nothing to do with the Reich Air Defense;
- c) The Signal Corps will play a most important role in any wars of the future, technical as such will be. The best brains must be employed there. To the operations of the Signal Corps can be attributed most decisive importance;
- d) The Reich Air Defense is important in all of its parts;
- e) Closest collaboration with offices responsible for the civilian population, and representatives of industry, is necessary;
- f) In occupied territories there must be organized among the civilian population units specially trained for use during and immediately following air raids.

The Reich Air Defense must develop new methods in order to meet the threat of rocket weapons. The construction of defensive weapons to meet this threat is indispensable and without doubt technically possible.

Responsibility for the proper organization of the defense of the Reich should be given to a Luftwaffe general, appointed commander-in-chief for this purpose. Assisting him in the task of the defense of

TOP SECRET

TOP SECRET

Germany should be a specially selected staff.

Directly subordinated to the Commander-in-Chief should be:

1. The Chief of reconnaissance units;
2. The Chief of fighter units;
3. The Chief of ground combat troops;
4. The Chief of ground personnel and supplies;
5. The Chief of passive air defense units.

Also assigned should be:

6. A government representative (Ministry of the Interior, Ministry of Commerce);
7. A representative of industry;
8. An Army liaison unit;
9. A Navy liaison unit.

Units of the following arms and services appear necessary for the defense of the Reich:

1. Flying Units

- a) Reconnaissance units;
- b) Single-engine fighter units (day fighters);
- c) Twin-engine fighter units (night fighters, escort for reconnaissance aircraft);
- d) Jamming units (jamming aircraft for jamming enemy R/T traffic and radar).

2. Ground Combat Units

- a) Light and heavy flak units;
- b) Anti-aircraft rocket units;
- c) Barrage balloon units;

TOP SECRET

TOP SECRET

- d) Smoke shell units;
 - e) Searchlight units.
3. Signal Units
- a) Signal intelligence units;
 - b) Radar and visual observation units;
 - c) Radio deception units;
 - d) Radio monitoring units (security) ;
 - e) Radio jamming units;
 - f) Communications units;
 - g) Construction units;
 - h) Fighter control units.
4. Ground Crews and Supply Units
5. Passive Air Defense Units
- a) Fire-fighting units;
 - b) Excavation units (gas, water, electricity, dredgers);
 - c) Air raid warden units;
 - d) Factory-defense units.

The defense of Germany depends on a very good communications network, and requires many direct lines. Command posts must have the newest and most modern equipment. Television between command posts should be provided. All command posts should be so constructed that airborne formations can be controlled by them.

In peacetime, all preparations must be planned and carried out to the smallest detail to insure smooth operation in time of war. Frequent exercises are most necessary, insofar as they can be carried out.

TOP SECRET